**Goal 1—Provide opportunities for student and faculty awareness of and interaction with the geospatial technology industry and the Geospatial Technology Competency Model (GTCM).**

**Objective Research Questions**

1. Increase the number of academic programs aligned with the Geospatial Technology Competency Model in order to improve student articulation; and to improve industry satisfaction with academic curriculum and needs alignment.

2. Maintain the integrity of the GTCM by updating it on a minimum five year cycle in cooperation with the Department of Labor’s Employment & Training Administration (DOLETA), and publish the results on their model competency clearinghouse.

3. Conduct a national competition to increase student awareness of the technical and professional competencies outlined in the GTCM, while providing a national showcase of two year college student talent to industry and universities.



4. Provide internship opportunities for students and externship opportunities for geospatial faculty at private corporations, federal agencies, and national laboratories to increase their technical expertise,.

1.1. Is the number of community college programs utilizing of the GTCM increasing?

1.2. Is the number of articulation agreements increasing between colleges and universities?

1.3. Are the curriculum assessment tools meeting the needs of geospatial faculty?

2.1 Is the GTCM current with the state-of-the-art technology and management practices as defined by a panel of national industry experts and facilitated by the Department of Labor’s Employment & Training Administration?

2.2 Is the latest research published on the DOLETA’s Model Competency Clearinghouse website?

3.1. How has the national competition increased students’ awareness of the broad range of opportunities in the geospatial industry?

3.2. Have the number of student competitors and GISP-certified judge volunteers increased each year?

4.1. Has the externship increased faculty member’s

professional and technical knowledge?

4.2. Do employers report a higher level of satisfaction with graduates of GTCM-aligned programs over non-aligned progra

**Goal 2—Increase the number of underserved and underrepresented students exposed to and mentored in geospatial technology.**

**Objective Research Questions**

5. Increase the number of minority students and women enrolled in geospatial education at two year colleges through effective mentoring as demonstrated in the AACC Mentorlinks program.

6. Increase access to geospatial education opportunities to rural and underserved populations through innovative techniques and technologies, such as distance learning courses across state lines.

5.1 Are the numbers of minority and women enrolled in partner colleges increasing?

5.2 Do faculty report satisfaction with the mentoring?

5.3 How is the mentoring impacting student enrollment?

6.1 Is the number of rural and underserved students enrolled in partner distance learning courses increasing?

6.2 Do rural and underserved students report satisfaction with distance learning courses?

**Goal 3—Provide opportunities for faculty professional development.**

**Objective Research Questions**

7. Improve faculty technical competence by expanding their access to cost-effective education and training opportunities through both traditional face to face instruction and innovative nontraditional methods, such as virtual conferences, webinars, and access to archived technical sessions.

8. Increase faculty engagement in professional organizations, such as URISA and NCGE, through: a) awareness efforts on behalf of these organizations, b) agreements for discounted faculty and/or student membership fees, and c) encouragement to participate in organization competitions.

9. Increase faculty and student participation in industry certifications, such as the ASPRS and GISCI and/or Esri vendor certification.

7.1 Do faculty members demonstrate an increase in competencies of new geospatial software and hardware technology?

7.2 Do faculty members report satisfaction with the professional development activities offered by the Center?

8.1 Is there an annual increase in the number of faculty members participating in local, regional, and national organization conferences?

8.2 Is there an annual increase in the number of faculty members joining professional organizations, such as URISA, NCGE, etc.?

8.3 Is there an increase in the number of partner

college students participating in organization competitions?

9.1 How are faculty and student perceptions on the value of certification changing?

9.2 Are more faculty and graduates seeking certifications?

**Goal 4—Maintain an educational resource clearinghouse.**

**Objective Research Questions**

10. Develop a model geospatial technology course pack addressing the competencies outlined in Department of Labor Standard Occupation Codes (SOC), under the geospatial technology industry cluster, for all the courses identified by research as part of a model geospatial certificate program that can easily adapted by new and existing geospatial programs.

10.1 Does faculty report satisfaction with the course packs?

10.2 Are the course packs meeting the needs of educators?

10.3 Are the courses identified in the model certificate meeting the competencies outlined in the SOCs?

10.4 Do the contents of the courses represent the

latest in geospatial technology?

11. Develop a database of geospatial academic programs at colleges and universities that utilizes an interactive map interface for querying using the latest technologies.



11.1 Does the national geospatial program database reflect the latest information available?

11.2 Does the national map interface provide the

functionality needed by end-users, such as potential students, faculty, counselors, employers, and parents?